

## 1st.—Observations for the Latitude.

RACINE.—September 6th, 1858.—Observations for the Latitude.

1.—Circum-meridian altitudes of Alpha AQUILÆ (Altair), South.

Number for reference.	Observed meridian distances in Sidereal time.	Reduction to the meridian.	Observed true circum-meridian altitudes of Star, as corrected for refraction and errors of sextant.	True meridian altitudes de- duced.	Latitude, deduced from each observation.					
					°	'	"	°	'	"
1	15 51.4	10 35.9	55 35 29.7	55 46 05.6	42	43	50.4			
2	13 19.4	7 29.3	55 38 42.2	55 46 11.5	42	43	44.5			
3	10 40.4	4 48.6	55 41 22.3	55 46 10.9	42	43	45.1			
4	8 53.4	3 20.1	55 42 52.3	55 46 12.4	42	43	43.6			
5	3 31.4	0 31.5	55 45 37.4	55 46 08.9	42	43	47.1			
6	1 28.4	0 05.4	55 46 04.9	55 46 10.3	42	43	45.7			
7	1 33.6	0 06.2	55 45 59.9	55 46 06.1	42	43	49.9			
8	4 37.6	0 54.2	55 45 12.4	55 46 06.6	42	43	49.4			
9	7 43.6	2 31.3	55 43 37.3	55 46 08.5	42	43	47.5			
10	12 11.6	6 16.4	55 39 59.8	55 46 16.2	42	43	39.8			
11	14 32.6	8 55.0	55 37 14.7	55 46 09.7	42	43	46.2			

LATITUDE, deduced from a mean of 11 altitudes of the Star °      °      °  
Alpha AQUILÆ (Altair) South ..... 42 43 46.3